

under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments

Please substitute the following claim 1 for the pending claim 1:

1. (Once amended) A method of making at least one nucleic acid molecule, said method comprising

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- (a) combining, in a mixture, at least one nucleic acid template, at least one polymerase or at least one reverse transcriptase, and an enzyme selected from the group consisting of a pentosyltransferase, a phosphotransferase with an alcohol group as acceptor, a nucleotidyltransferase, and a carboxy-lyase; and
 - (b) incubating said mixture under conditions sufficient to make one or more first nucleic acid molecules complementary to all or a portion of said nucleic acid template.
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Please add the following claims:


52. (New) The method of claim 1, wherein said enzyme is a pentosyltransferase.

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53. (New) The method of claim 52, wherein said enzyme is an adenine phosphoribosyltransferase or an orotate phosphoribosyltransferase.

54. (New) The method of claim 1, wherein said enzyme is a phosphotransferase with an alcohol group as acceptor.

55. (New) The method of claim 54, wherein said enzyme is a pyrophosphate: glycerol phosphotransferase, a pyrophosphate: serine phosphotransferase, a pyrophosphate: fructose-6-phosphate 1-phosphotransferase or a pyrophosphate: purine nucleoside kinase.



56. (New) The method of claim 1, wherein said enzyme is a nucleotidyltransferase.

57. (New) The method of claim 56, wherein said enzyme is an ATP: sulfate adenylyltransferase, a UTP: glucose-1-phosphate uridylyltransferase or an ATP: glucose-1-phosphate adenylyltransferase.

58. (New) The method of claim 1, wherein said enzyme is a carboxy-lyase.

59. (New) The method of claim 58, wherein said enzyme is a phosphoenolpyruvate carboxykinase.

60. (New) The method of claim 1, wherein said reverse transcriptase is a retroviral reverse transcriptase.

61. (New) The method of claim 1, wherein said reverse transcriptase is an AMV reverse transcriptase or a RSV reverse transcriptase.

62. (New) The method of claim 1, further comprising:

- (c) incubating said one or more first nucleic acid molecules under conditions sufficient to synthesize one or more second nucleic acid molecules complementary to all or a portion of said one or more first nucleic acid molecules.

63. (New) The method of claim 1, wherein said polymerase is an RNA polymerase or a DNA polymerase.

64. (New) The method of claim 63, wherein said DNA polymerase is thermostable.

65. (New) A composition comprising:

- (a) an enzyme selected from the group consisting of a pentosyltransferase, a phosphotransferase with an alcohol group as acceptor, a nucleotidyltransferase, carboxy-lyase; and
- (b) at least one polymerase or at least one reverse transcriptase.

66. (New) The composition of claim 65, wherein said enzyme of (a) is a pentosyltransferase.

67. (New) The composition of claim 66, wherein said enzyme of (a) is an adenine phosphoribosyltransferase or an orotate phosphoribosyltransferase.

68. (New) The composition of claim 65, wherein said enzyme of (a) is a phosphotransferase with an alcohol group as acceptor.

69. (New) The composition of claim 68, wherein said enzyme of (a) is a pyrophosphate: glycerol phosphotransferase, a pyrophosphate: serine phosphotransferase, a pyrophosphate: fructose-6-phosphate 1-phosphotransferase or a pyrophosphate: purine nucleoside kinase.

70. (New) The composition of claim 65, wherein said enzyme of (a) is a nucleotidyltransferase.

71. (New) The composition of claim 70, wherein said enzyme is an ATP: sulfate adenylyltransferase, a UTP: glucose-1-phosphate uridylyltransferase or an ATP: glucose-1-phosphate adenylyltransferase.

72. (New) The composition of claim 65, wherein said enzyme of (a) is a carboxy-lyase.

73. (New) The composition of claim 72, wherein said enzyme of (a) is a phosphoenolpyruvate carboxykinase.

74. (New) The composition of claim 65, further comprising a substrate which is capable of either accepting a phosphate radical to give a phosphorylated product from pyrophosphate or effecting transfer of pyrophosphate when in the presence of said enzyme of (a).

75. (New) The composition of claim 65, wherein said reverse transcriptase is a retroviral reverse transcriptase.

76. (New) The composition of claim 65, wherein said reverse transcriptase is an AMV reverse transcriptase or a RSV reverse transcriptase.

77. (New) The composition of claim 65, wherein said polymerase is an RNA polymerase or a DNA polymerase.

78. (New) The composition of claim 77, wherein said DNA polymerase is thermostable.

79. (New) A kit comprising an enzyme selected from the group consisting of a pentosyltransferase, a phosphotransferase with an alcohol group as acceptor, a nucleotidyltransferase, a carboxy-lyase, a substrate which is capable of either accepting a

phosphate radical to give a phosphorylated product from pyrophosphate or effecting transfer of pyrophosphate when in the presence of said enzyme; and
at least one polymerase or at least one reverse transcriptase.

80. (New) The kit of claim 79, wherein said reverse transcriptase is a retroviral reverse transcriptase.

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81. (New) The kit of claim 79, wherein said reverse transcriptase is an AMV reverse transcriptase or a RSV reverse transcriptase.

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82. (New) The kit of claim 79, wherein said polymerase is an RNA polymerase or a DNA polymerase.

83. (New) The kit of claim 82, wherein said DNA polymerase is thermostable.

84. (New) The method of claim 62, further comprising amplifying said first nucleic acid molecules or said second nucleic acid molecules.
